

ABSTRACT OF THE DISCLOSURE

A vehicle wheel suspension arrangement includes two long stroke vibration damping systems to reduce vibration associated with wheel hop and tramp mode. Each system is tailored to address the problem frequency bands and the systems preferably operate independently. In a preferred embodiment, the systems are placed in parallel. Each long stroke vibration damping system accommodates relatively large displacements associated with vehicle wheel suspension displacements associated with frequencies of less than 25 Hz. In a preferred embodiment, one vibration damping system is a shock absorber and the other vibration damping system works on hydromount principles and is capable of narrow (tunable) frequency band damping.